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# WATERLINES

News affecting the management and use of Indiana's water resources

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DIVISION OF WATER  
INDIANA DEPARTMENT OF NATURAL RESOURCES  
SUMMER 2006

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## BUYOUT PROJECT SUCCESS IN ALEXANDRIA HAZARD MITIGATION GRANT PROGRAM

*By Jeremy VanErman, Zoning Administrator for the  
City of Alexandria*

In July of 2003, the City of Alexandria, Indiana received a substantial amount of rain and the floodwaters overtopped its North Levee along Pipe Creek. This water then filled up several low portions of developed land in the floodplain along State Route Nine and into town.

Some properties had water near the windowsills, while others had fast moving water along their foundations and exterior walls. All of the homes in Alexandria's flood zone areas have been subject to "repetitive loss" and tend to experience major damage every 10 years. Many of the homes have replaced their floor joists more than once.

Originally the City approached the U.S. Army Corps of Engineers (USACE) for a fix to their flooding problem in the early 1980's. The best model produced by the USACE provided only four to six inches of flood relief at a cost of \$1.2 million to \$2.5 million. After failed attempts at working with the USACE on three different flood control projects over 20 years, the Federal Emergency Management Agency's (FEMA) Hazard Mitigation Grant Program (HMGP)

program emerged as the only viable solution to a major community problem.

After two years of coordination, grant writing, property procurement, and many phone calls from affected residents, Planning and Zoning Director Jeremy M. VanErman achieved success—the City received funding for the purchase and demolition of two of the most damaged properties, with another five acquisition projects pending. A list of twelve properties was submitted in the original application.

Alexandria was initially approved to receive funding through the HMGP for a total project cost of just under \$120,000, 75% of which came from FEMA (\$90,000), with 25% being local match of cash and in-kind services. At the time of this publication, additional funding of \$160,000 had been received to assist with the procurement of three to five additional properties. The city's match will be roughly \$53,000 for a total of \$213,000.

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415 N. Park Ave. in Alexandria prior to July 2003.



415 N. Park Ave. in Alexandria during July 2003 flood.



415 N. Park Ave. in Alexandria undergoing demolition after HMGP buyout.

When all has been completed, the City of Alexandria will have received \$333,000 of assistance (FEMA's direct share being \$250,000).

The City flooded again in January 2005. Again, the same homes were damaged, some of which were empty from damages due to the last flood. This causes a massive amount of distress on the neighborhoods. The City is currently working on Phase Two of a buy out program where Alexandria will apply for the acquisition of five more

properties. In accordance with the new requirements of FEMA, the City had to prepare and submit an acceptable All Hazards Mitigation Plan in order to receive any further assistance for future disasters.

Phase Three will consist of a Pre-Hazard Mitigation Grant and a Repetitive Loss Grant program through FEMA that proposes to purchase nearly 60 residential structures, razing these structures, and making the area permanent green space—becoming a part of the City's park system. The City plans to apply to the Department of Natural Resources for funding through their Parks & Recreational funding (INDOT TEA-21 monies) for stream bank widening and stabilization, levee improvements, trails, walk paths, and shelter houses along the Pipe Creek corridor. All of which is part of a 20-year master plan. These projects will be funded primarily through the City's Storm Water Funds, matching the proposed grants along with loans and/or bonds. ~~~

## CONGRATULATIONS!

On April 19, 2006, the Certified Floodplain Manager exam was offered in Indianapolis. Eight individuals passed the exam and earned the designation of CFM. Congratulations to Catrina Covino of Fort Wayne, Becky Davis of Lebanon, Travis Murphy of Noblesville, Gary Scagnoli, of Logansport, Robert (Tony) Scott of Shelbyville, James Luckiewicz, Stuart Peckham, and Darlene Simpson all of Indianapolis on their CFM status.

The CFM certification is a national accreditation for floodplain managers, which not only requires that the individual possess the knowledge to pass the exam, but also requires ongoing training and professional development to maintain the certification. The next offering for the CFM exam in Indiana will be at the Annual Conference of the Indiana Association for Floodplain and Stormwater Management in September. See the *Conference Corner* for more information. ~~~

## **eLOMA NOW AVAILABLE**

The Federal Emergency Management Agency (FEMA) now has an electronic Letter of Map Amendment (eLOMA) determination tool available through the Mapping Information Platform (MIP)— [hazards.fema.gov](http://hazards.fema.gov).

This time saving, user friendly web-based application will provide licensed land surveyors and professional engineers (Licensed Professionals) with a system to submit simple Letter of Map Amendment (LOMA) requests to FEMA. This tool is designed to make a determination based on the information submitted by the Licensed Professional and allow them to generate a determination from FEMA in minutes.

The initial release of eLOMA will enable Licensed Professionals to make requests for existing single residential structures or properties, provided no fill has been placed to raise the elevations of the structure or property. Approximately half of the LOMAs processed annually (about 10,000 cases) meet the requirements of eLOMA.

Historically, obtaining a LOMA took up to 60 days due to manual processing. Through the use of eLOMA, a Licensed Professional could receive a determination in the time that it takes to enter the required information online.

An eLOMA document will serve the same functions as a standard LOMA. The only difference between the two is that the online determination is made automatically with standard checks instead of being manually reviewed (e.g., traditional LOMA processing). In addition, eLOMA does not replace the LOMA procedure. The eLOMA determination tool is an optional process applicable to only the most basic LOMA requests. Requestors may continue to submit requests using the traditional process, if they wish. Currently, there is no charge to receive a LOMA, and eLOMAs also will be available to Licensed Professionals at no cost.

A Surveyor or Engineer must set up an account through the MIP using individual license certification information. The initial registration process typically takes five days. Once the Licensed Professional is registered on the MIP, he or she can log into eLOMA.

Once logged in, he or she will be given the option to create a new application or resume a previously saved application. The Licensed Professional will be asked to submit certified elevations. eLOMA will make a comparison of the submitted Base Flood Elevation (BFE) with the submitted Lowest Adjacent Grade (LAG) or Low Lot Elevation (LLE) and provide an instant determination for the Licensed Professional if the application has not been selected for FEMA audit.

If the application is selected for FEMA audit, the Licensed Professional will receive instructions for submitting their application materials to the National Service Provider (NSP). If the application is approved, the Licensed Professional will receive notification that they can login and print the determination. If the application is rejected, the LOMA will be completed by FEMA and the Licensed Professional will be audited again after his/her next submittal. After a successful audit the Licensed Professional will be able to generate eLOMA determinations online. However, he/she will be subject to random audits. An audit will typically be completed in five days.

For more information on eLOMA, please visit the MIP's Tools & Links tab, and select eLOMA under Other Resources.

For general inquiries, please contact the FEMA  
Map Assistance Center:

Phone: 1 877 FEMA MAP, select option 1

To report a technical problem, please contact the  
MIP Help Desk:

Phone 1 877 FEMA MAP, select option 2

e-mail: [MIPHelp@mapmodteam.com](mailto:MIPHelp@mapmodteam.com)

*Information taken from: [www.fema.gov/FEMA](http://www.fema.gov/FEMA) Map Assistance Center*

# REVISED ELEVATION CERTIFICATE IMPROVES LOWEST FLOOR DETERMINATIONS

*Abbreviated article originally written by Lynd Morris, NFIP  
Bureau and Statistical Agent*

The Federal Emergency Management Agency (FEMA) Elevation Certificate (EC) has been revised. The new EC has an expiration date of February 28, 2009. The new EC will not be required for insurance purposes and the Community Rating System until January 1, 2007.

## What's New?

The most significant changes to the EC are related to the size of any enclosure(s) below the lowest elevated floor of the building and to the inclusion of photographs of the building.



Additionally, the format of the EC has been revised to include all building description fields (including the size of the enclosure) in Section A and to use Section C only for documenting the

building's elevation information. This means that, when the surveyor, engineer, architect, or owner's representative (for those who use Section E because a survey is not required) completes the EC for the purpose of obtaining flood insurance through the National Flood Insurance Program (NFIP), the square footage of any enclosed area below the lowest elevated floor (including the attached garage) must be included.

Here is an overview of some of the other improvements that have been made to the EC and instructions.

## Front of the EC Form

- Section A has been reorganized to include a number of new lines for collecting square

footage of crawl space, enclosure(s), and attached garage, plus information about any pertinent flood openings (vents) present. For flood openings, the total area of openings has been clarified to state total "net" area is now required. In Section A, Latitude and Longitude are now required instead of being optional. The Building Diagram Number box has been moved from Section C to Section A

- In Section C, text has been added to clarify that the elevation for the top of the bottom floor includes crawl spaces or enclosures.
- Section D has been reorganized slightly so that the space for the certifier's license number and seal could be moved down from where it had been in Section C.

## Back of the EC Form

- Natural grade information is still requested in Section E, but the blanks have been reorganized and new text added to clarify whether the elevation information provided is above or below the highest and the lowest adjacent grades. Text also explains that the measurements taken must include crawl spaces in addition to basements and enclosures.

## Building Photograph Pages

- Two pages have been added for attaching two or more photographs of the building. Photos must be in color and measure at least 3" x 3" (900 x900 pixels). Digital or analog photos are acceptable.

## Instructions for Completing the Elevation Certificate

- New text has been added to the introduction to explain who should complete Sections A, B, and C and how to ensure that certification is complete.
- Section A instructions were expanded to provide more information about entering latitude and longitude. Instructions were added to explain the new requirement to provide photographs, how to select the correct building diagram,

## CHANGES TO THE LAKE PRESERVATION ACT

- measurement requirements for the crawl space or enclosure, and collecting information about permanent flood openings and attached garages.
- Section B instructions now include several items addressing how to list the location of buildings in annexed communities that were combined from the old EC into just one explanation. There are several new references to the source of the BFE and the elevation datum.
  - Section C instructions now provide more information about taking measurements of crawl spaces and machinery/equipment.
  - Section D instructions contain clarifications about the certifying professional's signature, seal, and date of certification.
  - In Section E of the instructions, a line was added to explain where to insert information that measurement is based on the "natural grade."
  - Text was added to the introduction to the Building Diagrams to request the square footage of any crawl space, enclosure(s), and attached garage, plus area in square inches of any flood openings present. Labeling of the diagrams has changed slightly to reflect changes in the labeling of affected lines on the front and back of the EC. In addition, Diagrams 6, 7, and 8 now contain text referring to enclosure and crawl space size.

### Changes for the Better

The EC is a valuable tool for providing detailed flood risk information not yet available through other means. The EC will provide more accurate determination of compliance with local floodplain management ordinance requirements for local floodplain administrators. As the information on the EC becomes more accurate, proper insurance rating of floodplain risks will ensure that consumers (and the lenders funding their mortgages) can better protect themselves against flood losses, and that insurance agents and surveyors are less vulnerable to liability in the event of a flood.

The EC is available on the FEMA Web site at the following address: <http://www.fema.gov/pdf/nfip/elvcert.pdf> ☞

Do you own property along one of Indiana's public freshwater lakes, or are you a contractor who does seawall construction or retaining wall construction around the public freshwater lakes in Indiana? If so, please note that there were changes to the Lake Preservation Act (Indiana Code 14-26-2) that became effective July 1, 2006.

Previously, a permit was required from the Department of Natural Resources (DNR) only if construction was proposed at or lakeward of the shoreline of a public freshwater lake – the DNR's jurisdiction ended at the water's edge. With the recent modification to the law, a permit is now also required from the DNR for the construction of any wall, retaining wall, or seawall landward of the shoreline if the following apply:

- 1) The wall is placed within 10 feet landward of the shoreline (as measured perpendicular to the shoreline), and;
- 2) If any portion of the wall is constructed below the legally established or average normal level of the lake.

This change in the law only applies to the construction of a wall and does not include such things as fence posts, flagpoles, etc.

For more information on the changes to IC 14-26-2, please contact the Technical Services Section of the Division of Water, DNR, at 877-928-3755. ☞



# CONFERENCE CORNER

## ANNUAL INAFSM CONFERENCE

The Indiana Association for Floodplain and Stormwater Management (INAFSM) 10<sup>th</sup> Anniversary Conference will be at the Abe Martin Lodge in Brown County State Park, September 13-15, 2006.

Ten years marks an important milestone for INAFSM. This is a unique opportunity to share experiences and knowledge with other professionals dealing with floodplain and stormwater management issues. The conference will be dazzled with Indiana flavor—from live entertainment by Indiana musicians to food and wines from throughout the state. What better place to celebrate than in the heart of Brown County!

The conference registration form can be found in the INAFSM Web site at [www.inafsm.net](http://www.inafsm.net). You can also find room reservation information, including the conference code you must use to get room reservations at Abe Martin Lodge. Don't miss this one!

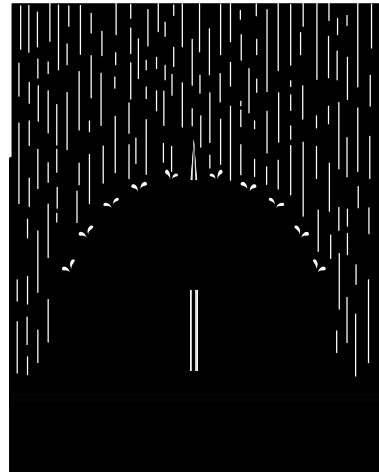
The Certified Floodplain Manager (CFM) exam will again be offered this year at the annual conference. Conference attendance is not required to sit for the exam. The exam will be conducted from 1:30 until 4:30 p.m. on Thursday, September 14, 2006. Exam applicants should visit the Association of State Floodplain Managers' (ASFPM) Web site at [www.floods.org](http://www.floods.org) for CFM qualification, exam requirements and CFM applications. Go to the certification box and click on "Apply". Applicants should have their applications and fees submitted to ASFPM, at least two weeks prior to the test date. No walk-ins will be allowed on the test date. Contact Steve Benagh, CFM, at (317) 266-8000 or [sbenagh@cbbel-in.com](mailto:sbenagh@cbbel-in.com) if you have questions on applying for the CFM exam.

## DAM SAFETY 2006

Dam Safety 2006 will be held September 10-14, 2006. This conference, dedicated to dam safety engineering and technology transfer, will be held at the Seaport Hotel and World Trade Center in Boston, Massachusetts. Hosted by the Association of State Dam Safety Officials (ASDSO), this conference will include more than 16 hours of educational instruction, conducted by experts in at least sixteen technical fields.

Specific conference information can be found at ASDSO's Web site at [www.damsafety.org](http://www.damsafety.org). ☞

## PRECIPITATION REPORT FOR JANUARY THROUGH JUNE 2006



During January, monthly rainfall was above normal in many central and southern Indiana areas. The weather was more typical of the month of March with wind, showers, and the occasional thunderstorm. Only an inch or two of snow fell one day in

central and southern Indiana. Snowfall at South Bend totaled only three and four-tenths inches, 19.8 inches below normal. Rainfall totals ranged from just over an inch to almost five inches. The major rivers remained at high levels through the month. Lowland flooding in portions of southern Indiana lasted from one to six days.

Overall monthly rainfall was below normal in most areas during February. Most areas received between one and two inches of rain during February; however, little or none of that rainfall occurred during the last 12 days of the month. Snowfall was below normal, with totals ranging from a trace to six and one-half inches. Many areas received one to three inches of snow during the

month. The major rivers remained at normal to high levels most of the month.



March started out quietly, but the quiet dry weather soon changed. During the second week of March, southern Indiana received six to more than 10 inches of rain, while northern Indiana received two to more than four inches of rain. Winter returned late in March with snowfall in central Indiana measuring from one to six inches. This was the most snow so late in the season at Indianapolis since 1912. On the last day of March, severe weather and heavy rain returned. Monthly rainfall was much above normal for central and southern Indiana. March rainfall totals at Indianapolis and Evansville were the highest since 1964. However, portions of northern Indiana received less than two inches during March.

April continued as March had ended for most of Indiana—stormy and wet. On April 2, a fast moving thunderstorm complex developed and raced across central Indiana. Much of the state was impacted by straight-line winds. Three small tornadoes also occurred—in the town of Mitchell in Lawrence County, at the City of Seymour in Jackson County, and in an area southeast of

Romney in Tippecanoe County. Monthly rainfall in central and southern Indiana ranged from two to more than seven inches. Most areas received between three to five inches. The drier areas were in northern Indiana, while the wetter areas were again in southern Indiana. However, as a whole, rainfall was above normal during April in Indiana.

May had a rainy start. Pleasant, dry weather occurred during mid-May before changing back over to a cool rainy end to the month. Overall, rainfall was slightly above normal during May.

During June, rainfall was normal to above normal in much of central and southern Indiana. The biggest rainfall during June fell on the evening of the 18<sup>th</sup>. Two to nearly seven inches of rain fell in much of the Sugar Creek watershed in west central Indiana. The heaviest rain occurred at Marshall in northern Parke County. This rain brought Sugar Creek to bankfull levels and caused a quick rise in the Wabash River from Montezuma to Vincennes. Monthly rainfall in central and southern Indiana ranged from around two and one-half inches to nine inches. The drier areas were in northern and western Indiana and the wetter areas in central and southern Indiana. ☁

		KEY:	<div><div>ACTUAL (INCHES)</div><div>NORMAL (INCHES)</div></div>				
Locations	January 2006	February 2006	March 2006	April 2006	May 2006	June 2006	Totals 2006
CHICAGO	<u>2.72</u>	<u>1.80</u>	<u>2.73</u>	<u>3.59</u>	<u>3.65</u>	<u>4.05</u>	18.54
IL	<u>1.75</u>	<u>1.63</u>	<u>2.65</u>	<u>3.68</u>	<u>3.38</u>	<u>3.63</u>	16.72
SOUTH BEND	<u>2.87</u>	<u>.95</u>	<u>3.08</u>	<u>2.41</u>	<u>5.45</u>	<u>2.00</u>	16.76
IN	<u>2.27</u>	<u>1.98</u>	<u>2.89</u>	<u>3.62</u>	<u>3.50</u>	<u>4.19</u>	18.45
FORT WAYNE	<u>3.01</u>	<u>1.64</u>	<u>1.98</u>	<u>4.26</u>	<u>5.04</u>	<u>3.36</u>	19.29
IN	<u>2.05</u>	<u>1.94</u>	<u>2.86</u>	<u>3.54</u>	<u>3.75</u>	<u>4.04</u>	17.09
INDIANAPOLIS	<u>3.30</u>	<u>1.89</u>	<u>6.79</u>	<u>3.63</u>	<u>4.34</u>	<u>5.63</u>	25.58
IN	<u>2.48</u>	<u>2.41</u>	<u>3.44</u>	<u>3.61</u>	<u>4.36</u>	<u>4.13</u>	20.43
EVANSVILLE	<u>4.09</u>	<u>2.17</u>	<u>9.36</u>	<u>3.44</u>	<u>5.77</u>	<u>3.73</u>	28.56
IN	<u>2.91</u>	<u>3.10</u>	<u>4.29</u>	<u>4.48</u>	<u>5.01</u>	<u>4.10</u>	23.89
LOUISVILLE	<u>6.06</u>	<u>2.17</u>	<u>5.52</u>	<u>7.52</u>	<u>7.18</u>	<u>5.85</u>	34.30
KY	<u>3.28</u>	<u>3.25</u>	<u>4.41</u>	<u>3.91</u>	<u>4.88</u>	<u>3.76</u>	23.49
CINCINNATI	<u>4.21</u>	<u>1.34</u>	<u>6.92</u>	<u>5.06</u>	<u>3.13</u>	<u>3.67</u>	24.33
OH	<u>*2.59</u>	<u>*2.69</u>	<u>3.90</u>	<u>*3.75</u>	<u>*4.28</u>	<u>*3.84</u>	*21.05

Note: \*Normal values not updated for this period. Official and certified climate data can be accessed at National Climatic Data Center (NCDC) <http://www.ncdc.noaa.gov/oa/ncdc.html>

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